Yi 2
7397
F 13

Hearing cont:

~~Of the Mind~~ 423

~~Of Memory~~ 426

~~Of Imagination~~ 429.

~~Of the Passions~~ 428

~~Of the moral faculties~~ 430.

~~[illegible]~~

hee hear imperfectly when we ~~[illegible]~~
~~[illegible]~~ or speak in a very
acute or ~~[illegible]~~ shrill tone of voice - for
the air which is expelled with great
force thro' the glottis (rendered extremely
narrow by the acuteness of the voice) is
thrown into the tympanum thro' the
Eustachian tube
~~[illegible]~~ in ~~[illegible]~~ so large a quantity
& with such force as to disturb the
harmony between the external & inter=
=nal air, and to protrude the membrana
tympani outwards. ~~[illegible]~~ It is
said that the famous Roman Orator
Tiberius Gracchus frequently lost
the tone of his own voice by speaking
so loud that, he used to cry like an
old woman, nor was he cured of

~~440~~ ~~390~~ this fault in Speaking Untill he
carried a Tenant with him who used
to sound a certain tone upon a
pipe to which he always accommo-
=dated his Voice. —

we hear imperfectly when we
yawn — owing to the entrance of Air
thereby being Obstructed into the Eustac-
=chian tube. —

It is happy for us that Sounds are
unlike light in not being Obtruded
upon us at all times. were this
the case, we should hear but one of
them at once, and loose all the Pleas-
=ure & pleasure we derive from their
Variety & Succession. —

we ~~have~~ have but one sensation from
~~the~~ two impressions made upon
the organs of hearing. The reason is
Obvious. ~~The~~ The impressions are made
upon the same spot in each ear,
& ~~reach the~~ our minds - ~~which~~
which are single, will receive but
One Sensation at Once. ——

Dr. Reid has expressed a doubt
whether a musical ear does not
depend upon some peculiarity of
Organization in that organ. I have
no doubt - upon this subject, - for
I believe it does not, - On the contrary
I believe with the late Dr Gregory that

rised

It is agreeable to observe the progress
of the pleasures we derive from
our ears in the different stages of
life. Children are pleased with simple
sounds of any kind. Young people
delight in melody, that is in an agreeable
succession of tones - While persons more
advanced in life can enjoy pleasure
only from Harmony, that is tones of
different kinds so combined, as to produce
a variety of impression upon the organs
of hearing. The same changes take place
in the objects of taste in the different stages
of life.

It is remarkable the pleasure derived from
mellod sounds is universal. Who ever heard the singing
of birds without being delighted with it? now the notes of
all birds are mellod only - they do not reach to harmony. -
There seems to be an original & natural
Union of pleasure with certain musical
Impressions upon the ear - But this
pleasure is greatly heightned by those impr-
-pressions being associated with certain
events, situations, or thoughts - or with which

very human creature has an innate capacity of acquiring a knowledge of musical sounds. It is true some persons have more genius or taste for Music than others - and so have some even more genius or taste for mathematicks than others, but those who want this genius or taste for mathematical learning possess from nature a capacity for it - and often from close application to it supply the defect of Genius or taste by great attainments in that useful Species of knowledge. V

(a) The Sense of hearing is next to Vision in its importance & uses. Life deprived of Hearing says Le Cat is a kind of premature Death. GB,

our minds were affected, the first
time we felt them.

The Sense of ~~Vision~~ hearing is next to
Vision in its importance & Uses.
Life, deprived of this Sense says
Le Cat is a kind of premature death.

go to 5 next page

in treating upon [illegible]
that is, that the senses are the
avenues of thought, and that with-
=out them, we should be reduced
to the condition, not of the brutes,
but below them; we should
~~would in existence with the two of~~
~~the five~~ be but little more than

her hands

V Thus a sudden flash of lightning
temporary or
often excites vision ^ hearing in the
eyes & ears of persons who have
long been blind & deaf. - Thus
too tumor, often excites for a while
the torpid limbs of paralytic patients.
- Suffering acts like the lightning, & tumor
in the above cases, upon the paralytic
Sense of Deity. in the same who has lost
all return to p 433.
he wears ^ God that is a dog, or a horse, return
to p 433

~~1~~ ~~2~~ 5 1

The sense of hearing is rendered more acute,
and prolonged,

1 By preventing an undue accumulation
of Wax in it, also of Dust which sometimes
insinuates into the meatus auditorius. This
is to be done by wiping it daily with a
wet cloath. 2 By elevating the external ear, &
shutting the eyes and placing the hand behind it.
3 By accustoming the ear to distinguish
certain sounds ~~&~~ such as those which
are emitted by striking different kinds of wood
and metals; and the weight or figure of
each of them.
4 By an Acoustic.

The wonderful atchievments of the
sense of hearing in persons who have lost this
eye show the perfection of which this sense
is capable. Recollect the fact of the two
Doctors mentioned in the Lectures upon
animal life. There is a blind young man

in this city who can tell the ~~practice~~ character by quit of a horse by hearing the motions of his feet in trotting thro' our Streets. ~~?~~ a ~~similar degree~~ instance of

Acuteness in the sense of hearing After the loss of sight has been noticed by Spalanzani in a bat. After ~~first~~ it put out its eyes, & then let it loose in a room. In flying thro it, it always avoided Obstacles of all kinds and turned when it came near a Wall owing probably to the difference of sounds emitted by its wings from the reaction of the Wall upon the air. That this perception was in the ears of the bat Spalanzani proved by previously destroying its senses of taste smell, without producing any change in its retreat from the Wall. After finally destroyed its sense of hearing, the conse=quence of which was it lost its power of perceiving its proximity to

the Wall, and fell against to the floor.

Perfection or Acuteness of hearing is highly important & useful in many of the pursuits and professions of men. The the Sailor and the Warrior have often profitted by it. much might add to our knowledge in Medicine by extending the powers of this Sense - particularly in distinguishing the differences and changes in the Voice and Speech, and in the Various modes by and all the different notes of pain. which respiration is in many diseases ^ an acute Sense of the practice of Surgery; - hearing would be useful in distinguishing the grating of peices of bones upon each other, and the noise of the Sound in or recesses for a

V is that in a future State of existance, new
senses dormant will be opened for the acquisition
of knowledge — but if the capacity for
acquiring knowledge by the five Senses we
possess, may be extended & improved in
the manner that has been mentioned,
the addition of new Senses will be un=
necessary for that purpose. Should the Sense
of Smell be increased in its powers as to dis=
tinguish the composition of bodies by barely
handling them — Should the Sense of taste be=
come capable of detecting the component parts
of the air — Should the sense of Smell be
rendered so acute as to receive pleasure from
the Odors of a Distant country — Should the eye
improved
become so in its strength as to
discover the the Component parts of all
the properties of the Sun to
, and Should the ear become so =

stone in the bladder. ~~We have seen~~

~~[illegible] [illegible]~~ In a profession which requires

such an extent of Capacity & knowledge

as Medicine, the Cultivation of all the

senses in the manner that has been

mentioned should form a part of a medi-

-cal education. In a sick room — we

should endeavour to be all touch — all

taste — all smell — all eye & all ear —

in order that we may be all mind,

for our friends as I shall presently

see our friends impressions upon

are the products of impressions upon

Our senses.

I shall dismiss this part of our subject,

by taking notice of an opinion which has been

held by some Christian philosophers, and that

refined [illegible] to be capable of
[illegible] as to convey
with the spirits or immaterial beings, it would
not be a much greater exhaustion of the
senses than takes place in them in this
world from Disease and other causes
that have been mentioned. V see below

[illegible]

V The following is the order of [illegible]
certainty in the testimony of our
[illegible] senses - Touch
sight & hearing - (from
the number of Objects which strike
the ear as the same time)
& smell
& taste. The greater uncertainty of taste
than the other senses is evinced by the
common saying "de Gustibus non
est Disputandum" - [illegible]

p. 11

O.

we have thus finished the history of the individual Senses of touch - taste smelling - seeing and hearing, and have mentioned the advantages we derive from each of them. It remains that I take notice of the advantages we derive from the combined Operation or actions of them all, and I shall repeat ~~them~~ they are the surfaces ~~the~~ upon which impressions act in the production of animal life. Air by its action upon the sense of touch extended ~~to the~~ to the lungs, fixed bodies by their action

V 2 we are indebted to our senses
for an immense map of corporeal
pleasure, for an account of which
I refer you to my printed lecture
upon the pleasures of the senses. &
particularly for ~~tha~~ ~~its~~ this proximate
cause which you will find in the
427 page of the Volume of introductory
letter. A knowledge of this cause will
enable you more readily to understand
the proximate cause of pain which
will be taken notice of in our patho=
=logy. —

upon the tongue, - Does by their impression upon the nose, light & by its action upon the eyes - and sounds by their impression upon the ear, form a large proportion of the stimuli to which we owe animal our existence. As we love life & all its animal enjoyments let us therefore duly appreciate our senses. But we are indebted to our senses for our minds, and for all the advantages we derive from our intellectual, moral and social existence. Without our senses, we should be reduced to the condition, not of Brutes, but

but below them, ~~but below them,~~
- we should be reduced in point of
intelligence, to a level with logs
and stones. ~~Consider~~ It is true in
the Absence of Sensation, motions might
still be excited in our bodies by certain
external and internal impressions, but
these motions would produce no ideas,
for ideas are the offspring of previous
Sensation, and without Senses there could
be no Sensation. As well might I
= attempt to excite ~~them~~ an idea, or that
in this desk by striking it with my
hand, as ~~either~~ expect to excite a
single idea or thought in the mind
when deprived of the avenues of the

V "Nihil" ~~Inspect it again "nihil~~
est in intellectu, quod non prius
fuit in Sensu": is as true as that we
did not make ourselves. As we have
our intellectual - moral & social existence
Therefore let us appreciate our senses.

I owes to it. It is agreeable to con-
template the gradual order in which
impressions act upon the
senses in evolving the mind. The first
impressions upon the brain the feat
of the mind, we made thro the
medium of the sense of touch.
hence from long habit, it becomes
the most perfect of all the senses.
The impressions upon this sense I
have said begin in the womb, &
hence as I shall say presently the
origin of Instinct. It is further
stimulated by the air acting upon
the lungs, and the skin in a new
born infant. The smell of its mother
milk probably forms the next stimulus,
the taste of

this with ~~the stomach~~ upon its tongue
constitutes the next stimulus, sounds
then act upon its ears, and light
with all the objects of Vision ~~pass~~ to
afford the last stimulus in arous=
=ing the faculties of the mind. The
more early, and the more constantly
these impressions act, the more the
mind will be evolved, and vice versa,
the fewer and the more feeble the
impressions are upon the senses, the
less will be ~~the food~~ of mind. The diminution
of the number or activity of the senses
is followed by a diminution of mind;
This is most obvious in ~~the~~ which is always
~~the~~ the loss of hearing attended
with a decay of intellect. Where

V mind completely formed by the com=
~~Valuable Channels~~ =bined operations
of all the Senses ? ~~&~~ Dear Channels
of our exalted rank in the Scale of
Beings and of all our knowledge and
pleasures — Your

V have existed Sects of philosophers
who have denied their importance
and usefulness in the acquisition of
knowledge, and who have endeavoured
to persuade us into general Scepticism
by teaching us to doubt or disbelieve the
testimony of our senses, and to reject
all the knowledge we acquire by them.

shall we find language to express our
Obligations to the ~~Author~~ Power of the previous
~~Instances of our Powers~~ existence &
~~Immortal Creatures~~ rational and immortal ~~Creatures~~ &
Science met with a Clergyman who composed
an inventory of his property. In this inven-
tory he included his eye sight, and his
Purse of hearing each of which he valu-
ed at £10,000. ~~At this rate of Appre-~~
~~ciating the Value of the whole~~
~~of them~~ But how trifling is this Sum
compared with all the wonderful Capa-
cities and unlimited enjoyments of a
~~Immortal~~ Their Value is beyond
all calculation & above all price.
After this Account of the advantages
we derive from our Senses, you will
hear with Surprize, that there is

(6) There has always been among men
the same disposition to usurpation in
Science that there is of power. The
philosophers who have deprived the
testimony and use of our senses in
acquiring knowledge have extolled
reason exclusively, at this expense,
thereby meaning to teach the bulk
of mankind who possess Senses only
that they are unfit to think for
themselves, and that it belonged to the
men of reason only to govern the opini-
-ons of the world.

We hear much Grut:: of the Craft
of the Church, but I am satisfied there
is more Craft in philosophy, and I am
sure there never existed a Sect of

V I have barely mentioned the absurdities & nonsense of some of the opinions of these philosophers respecting the Senses. I shall enumerate a few of them.

1st. They have taught, that our senses deceive us when the ideals of heat - or cold, & light sound, - for that they are all four mere perceptions of the mind, & that they have no existence in Nature - they have taught further that our ideas are not the images of external objects, but creatures of the mind wholly unconnected with the objects that excite them - nay, they have gone further, - and have taught that there is no such thing as matter independant of ideas, and that all the ideas the earth - the sun - the moon - even our own flesh which we feel have no real existence, but are illusions of the senses. all more

Christians – nay I will add further,
I am sure there never existed a Sect
of Pagans who believed in one half
the Absurdities and nonsense which
are inculcated in the Writings of
Hume, Voltaire, Helvetius, Mirabeau,
Godwin, Tom Paine and many others
~~Theological Writers~~ who have ad=
=vocated the perfection and divinity of
human Reason as the only guide
to knowledge and happiness. V

But let us inquire how far
our Senses against which these philo=
=sophers have raised so much clamour,
deceive us. This inquiry will teach
us that their supposed Deceptions de=
=pend wholly, not upon the Senses, but

the imperfection of human reason.
The appearances which are supposed
to be prove the fallacy of the Senses may
be reduced to fores heads.

1 Many things are called deceptions of
the Senses which are false Conclusions
drawn from this testimony, and
founded upon the imperfect exercise of
our Senses. 29. If I see an artificial
rose, and presume it to be a real one,
the deception arises from my not sub-
-jecting it to the examination of
the Senses of Smelling & touch
as well as to that of Seeing, agreeably
to the laws of the Senses formerly
mentioned. It is strange this re-
-mark has been so little attended to,

since it is obtruded upon us by the
practice of every infant that comes
into the world. They first examine things
by their eyes, - then they handle them,
afterwards they put them into their
mouths in order to subject them to the
Sense of taste, and sometimes use ob=
=serve them to shake them as if to
subject them to the Sense of hearing.
by
2. Many of the deceptions of our Senses
arise from certain acquired or habitual
perceptions. Thus after having long
been accustomed to the sight of a globe,
I should accidently see an exact dis=
=tribution of light & colors upon can=
=vas which I have been accus=
=tomed to see upon a Globe, I suppose

it to be a <u>real</u> Globe. The testimony of
my eyes here is true, but my error
lies in the conclusion drawn from
that testimony, viz that the Object
I see has three Dimensions, and a
Spherical figure. To this class of ac-
=quired or habitual Deceptions belong
all the errors of Senses with respect to
the magnitude and distance of the
Heavenly bodies.

A 3d Source of the supposed Deceptions
of our Senses arises from our igno-
=rance of the Laws of nature. The crook-
=ed appearance of a stick in the
water — the circle of fire which ap-
=pears from waving a burning coal

with a quick hand, — the small
size of the Sun and the moon, &
the ~~Heliocentric position~~ apparent motion of the Sun
~~in the Centre of~~ are all deceptions
of this kind. They are all corrected by
reason, for the Being who gave
us Senses intended to correct their
exercise with reason as much as
he intended to connect the exercises
of two or more of the Senses with
each other. This connection of reason
with the use of the Senses is happily
exposed by one of the prophets
in his prediction of the future cha=
=racter of the Messiah. "He shall
make him of quick Understanding,

and he shall not judge after the sight of his eyes, neither reprove after the hearing of his ears" Isaiah 3. 11 intimating thereby the necessary connection of the exercises of the understanding with those of the senses in acquiring knowledge, & guiding with truth and equity upon the affairs of men.

A 4th Source of supposed deceptions in the Senses arises from this disease. Thus we see double when we do not direct both eyes to the objects we wish to examine, but this proves the imperfection, & not the fallacy of the Senses. The same objections apply with equal force to the use of over

memories, imaginations & Under-
-standings, for they are all equally
liable to fallacy from disease.

Besides the two Channels for obtai=
=ning knowledge which have been
named, viz our Senses & our reason,
there is a third called testimony which
acts through what I shall hereafter
denominate the principle of faith.
They were all three as much intended
~~for the same~~ to aid us in acquiring
knowledge, as all the Senses, or as
two eyes, or two ears are given to
us as capacities of impressions, &
the philosopher might as well ad=
=vise us to destroy a part of our
Senses, as rely exclusively upon
all our Senses - or upon our

reasons, or upon testimony for the
acquisition of knowledge. These
three Sources are not only necessary
for that purpose, but they all three
~~do~~ act involuntarily upon our
minds in producing Conviction,
or acts of our judgment. I shall
illustrate each of them. I now see
~~a number of Ladies & Gentlemen~~ a number of Gentlemen
assembled in this room listening with attention
to what I am now delivering. This
is an act of my Sense of Vision. It
is an involuntary as the pulsation of
my heart.
2 I am sure you cannot occupy
your Seats in this room, & Seats in

V In apenting to this report I obey
a law of my nature, and were I say
I disbelieved it, you would justly
call my veracity in Question, or sup=
=pose my friend not to be in a sound
State. —

your own house ~~the Ontological Theatre~~ at the same
time. This is an act of my reason,
and I cannot more resist a belief of
it than I can the evidence of my
Vision in the former case. —

3 I believe there exists in the State of
Massachusetts a town called Boston. It
~~I have it~~ is true ^ I have never seen it, but so
many people have told me that they
had were born in it, or lived in
it, or passed thro' it, ~~that~~ I am com-
=pelled, in spite of myself, to believe there is such a town
~~I believe~~ ^ ~~in spite of reason~~, and ~~so~~
with as much ~~confidence~~ certainty as I do
my eyes and my reason in the
facts I have just now mentioned. V

24.30

V have arisen from this act of dis=
=organization of the works of the
Author of ~~Nature~~ nature. Spectres, and
apparitions would have been un=
=known had the company connection
of the Senses alone been called in to decide
upon them. For example – Ghosts it
has been said have been seen & heard
but never handled. Now I said formerly
touch is absolutely necessary to the cor=
=rectness of Seeing & hearing. But 2.4
belief in Ghosts is contrary to reason
for a material being cannot act on
immaterial being, and 3.rd a belief
in them is contrary to the laws of
testimony, which requires the concur=
=rence of several witnesses – Now Ghosts or
Spirits are generally seen by one person
only, and that person – generally under

Let us therefore always recollect 1. the dependance of the Senses upon each Other of which I mentioned to many instances formerly & 2 the original, natural & necessary connexion of the Senses, reason & testimony with each Other for the purpose of acquiring subjects. correct knowledge upon all ~~knowledge~~. This ~~is the Union~~ Union of the Senses, ~~established by Heaven~~ when with each Other, and of all the Senses with reason and testimony was established by our Creator as the only certain means of discovering truth. — In the language of the marriage Service thus therefore, I boldly proclaim "What God has joined together, let no man put asunder". — A thousand errors

the influence of great terror, or a
strong predisposition to believe in
ghosts from a defective Education.